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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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EXAMINER

MORILLO, JANEL COMBS

ART UNIT PAPER NUMBER

1742

DATE MAILED: 04/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|-----------------------------------|------------------------------|--|
| Office Action Summary | Application No. 10/821,170 | Applicant(s) CHIBA ET AL. | |
| | Examiner Janelle Combs-Morillo | Art Unit 1742 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 5-10 and 17-22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 11-16 and 23-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>7/7/04</u> | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Restriction

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-4, 11-16, 23-26, drawn to a Co alloy wire, classified in class 420, subclass 436.
 - II. Claims 5-10 and 17-22, drawn to method of casting a Co alloy, classified in class 164, subclass various.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions II and I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product can be made by a materially different process such as drawing.

3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

4. During a telephone conversation with Bob Carpenter on November 8, 2004 a provisional election was made with traverse to prosecute the invention of group I, claims 1-4, 11-16, and 23-26. Affirmation of this election must be made by applicant in replying to this Office action.

Claims 5-10 and 17-22 are withdrawn from further consideration by the examiner, 37

CFR 1.142(b), as being drawn to a non-elected invention.

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5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-4, 11-16, and 23-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stinson (US 5,891,191).

Stinson teaches a Co-Cr-Mo alloy fine wire with a diameter between 0.025-0.500 mm (25-500 μ m) for an implantable medical device (column 3 line 32), said alloy comprising (in wt%): 26-31% Cr, 4-8% Mo, <2% Ni, balance Co (column 3 lines 42-45).

Concerning the degree of roundness (cl. 1, 4, 15, 16), Stinson teaches that filaments #12 (wires) of said Co alloy are substantially homogeneous in cross section (see Fig. 3, column 5 lines 5-7). Concerning the concentration ratio of Mo, Cr, or Co (cl. 1-3), Stinson teaches the composition of said wires are also substantially homogeneous (column 5 lines 9-10). Therefore it is held that Stinson meets the instant limitations of degree of roundness and concentration ratio.

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Overlapping ranges have been held to be a prima facie case of obviousness, see MPEP § 2144.05. It would have been obvious to one of ordinary skill in the art to select any portion of the range, including the claimed range, from the broader range disclosed in the prior art, because the prior art finds that said composition in the entire disclosed range has a suitable utility. Because Stinson teaches a Co alloy wire with alloying ranges that overlap or touch the boundary of the presently claimed alloying ranges, it is held that Stinson has created a prima facie case of obviousness of the presently claimed invention.

Concerning claims 11-14 and 23-26, Stinson teaches said alloy wire is woven to form a lattice structure (column 4 lines 8-11, Fig.1), thereby forming a stranded cable with a tubular cross section. Though Stinson does not specify a planar profile/body, it would have been within the scope of Stinson to form a planar edge of said stranded cable. The limitation “planar body” does not patentably distinguish the claimed Co-Cr-Mo alloy woven wire from the prior art’s Co-Cr-Mo alloy wire woven into a substantially tubular body (see MPEP 2144.03).

Concerning claim 15, which mentions said Co alloy wire has an internal structure of gamma phase or epsilon phase only, or both of them only, the examiner asserts that “products of identical chemical composition can not have mutually exclusive properties.” *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). A chemical composition and its properties are inseparable. Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established. In *re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). Therefore, if the prior art teaches

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a substantially identical chemical structure, the properties applicant discloses and/or claims (such as alloy phases) are necessarily present. See MPEP 2112.01.

8. Claims 1-4, 11-16, and 23-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stinson (US 5,891,191) in view of JP 2002-363675A (JP'675). Stinson is discussed in paragraphs above.

Concerning the instant range of Mo, as stated above, Stinson teaches a maximum of 8wt%. However, JP'675 teaches higher Mo (up to 12%, see abstract, etc) is useful for corrosion and abrasion resistance (see [0004]). It would have been obvious to one of ordinary skill in the art to increase the Mo content of the Co-Cr-Mo alloy taught by Stinson, because JP'675 teaches higher Mo (up to 12%, see abstract, etc) is useful for corrosion and abrasion resistance (see [0004]).

For other limitations of the instant claims, see discussion of Stinson in paragraphs above.


Conclusion


9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Janelle Combs-Morillo whose telephone number is (571) 272-1240. The examiner can normally be reached on 8:30 am- 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


JCM
March 23, 2005


GEORGE WYSZOMIERSKI
PRIMARY EXAMINER
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